UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/694,288	10/24/2000	Timothy A. Lewis	078091/0275	1663

7590	01/30/2004

Kimberley G. Nobles
IRELL & MANELLA LLP
840 Newport Center Drive, Suite 400
Newport Beach, CA 92660

EXAMINER
MASHAAL, ALI M

ART UNIT	PAPER NUMBER
2136	6

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No. 09/694,288	Applicant(s) LEWIS, TIMOTHY A.
	Examiner Ali M. Mashaal	Art Unit 2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 October 2000*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-44* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 October 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

1)   This action is in response to communication on 10/24/2000.

2)   Claims 1-44 are under examination.

3)   IDS filed on 10/28/2002 has been considered and a signed/initialed copy has

been included with this office action.

Specification

4)   On page 7, line 13, applicant refers to an application that has now become a

patent. Applicant is required to update "application serial No. 09/404,298" with "Patent

No. 6,487,713.

Claim Rejections - 35 USC § 101

5)   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 25-34 are rejected under 35 U.S.C. 101 because they are not tied to any

device, but rather merely cite limitations that are strictly software based. Examiner

suggests that these claims, like the rest of the independent claims, be tied in to a

device, such as a computer readable medium having computer executable code.

Claim Rejections - 35 USC § 102

6)   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-44 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by US Patent No. 6,178,550 to Pearce.

As per claims 1, 7, 13, and 19, Pearce teaches a method for securely transferring control to a system management mode (SMM) after the generation of a system management interrupt (SMI) by a program executing on a computer, comprising: detecting the generation of an SMI from a caller in the application program (see col. 2, lines 39-45); determining in SMM if the caller is included in a dispatch table (col. 2, lines 45-57); dispatching to a target function that is associated with the caller in the dispatch table if it is determined that the caller is included in the dispatch table (col. 2, lines 45-47); and executing the target function (col. 2, lines 45-47).

As per claims 2, 14, 8, and 20, Pearce teaches all the limitations of the base claims as discussed above, and further teaches exiting from SMM after completing the execution of the target function; and resuming the processing of the application program, (see figure 2, element 220 which follows from element 218, indicating that after execution of the function, within the SMM code is a return from SMM command, returning control back to the base code).

As per claims 3, 9,15, and 21, Pearce teaches all the limitations of the base claims as discussed above, and further teaches identifying the type of SMI that is detected; and dispatching the detected SMI to an SMI event handler in SMM based upon the identified type, wherein the SMI event handler determines if the detected SMI

is included in the dispatch table (see figure 2, elements 214, and 202, and accompanying description).

As per claims 4, 10, 16, and 22, Pearce teaches all the limitations of the base claims as discussed above, and further teaches exiting from SMM if it is determined that the caller is not included in the dispatch table (see figure 2, element 219 and accompanying description).

As per claims 5, 11, 17, and 23, Pearce teaches all the limitations of the base claims as discussed above, and further teaches the dispatch table is only visible in SMM (see col. 3, lines 44-50).

As per claims 6, 12, 18, and 24, Pearce teaches all the limitations of the base claims as discussed above, and further teaches the dispatch table is created during the compilation of the program (see col. 5, lines 42-45, in which Pearce discloses that the tables can be dynamic without parting from the scope of his invention).

As per claims 25, 30, 35, and 40, Pearce teaches compiling the source code; identifying at least one predetermined indication in the source code that identifies the location of an SMI call and its target (see col. 2, lines 39-43); creating a dispatch table based on information associated with the predetermined indication, (see col. 2, lines 43-47, and col. 3, lines 44-50), wherein each entry in the dispatch table associates a caller (see col. 4, table II), which generates an SMI in the program (see figure 2, element 212 and accompanying description), with a target function to be executed (see figure 2, element 218 and accompanying description) in system management mode (see figure

2, in which elements 214, 218, and 220 are all boxed within the SMM code part of the figure); and storing the dispatch table where it is accessible by a dispatcher in SMM (again see figure 2, in which elements 214, 218, and 220 are all boxed within the SMM code part of the figure, as well as figure 1B element 104, and accompanying description).

As per claims 26, 31, 36, and 41, Pearce teaches all the limitations of the base claims as discussed above, and further teaches that the predetermined indication identifies to which target function to dispatch (see col. 4, table II).

As per claims 27, 32, 37, and 42, Pearce teaches all the limitations of the base claims as discussed above, and further teaches identifying callers in the dispatch table by addresses, and sorting the entries in the dispatch table according to the addresses of the callers (see col. 2, lines 27-33).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7)   Claims 28, 29, 33, 34, 38, 39, 43, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,178,550 to Pearce as applied to claims 25, 30, 35, and 40, respectively, in view of US Patent No. 5,966,539 to Srivastava.

7.1)   As per claims 28, 33, 38, and 43, Pearce teaches all limitations of the base

claims, but fails to explicitly teach linking compiled SMM code together with the dispatch

table. However, Srivastava in an analogous art, teaches the claimed limitation (see

abstract). It would have been obvious to one having ordinary skill in the art at the time

the invention was made to link compiled SMM code together with the dispatch table.

One would have been motivated to do so with the expected advantage of link time

optimization, as explicitly taught by Srivastava (see col. 2, lines 34-44).

7.2)   As per claims 29, 34, 39, and 44, the Pearce-Srivastava combination teaches all

limitations of the base claims. Pearce further teaches all limitations of the claimed

invention. As per executing the program, the compiled code generated in Srivastava is

ready for execution. As per detecting the generation of an SMI from a caller in the

program, (see Pearce col. 2, lines 39-45); determining in SMM if the caller is included in

a dispatch table (Pearce, col. 2, lines 45-57); dispatching to a target function that is

associated with the caller in the dispatch table if it is determined that the caller is

included in the dispatch table (Pearce, col. 2, lines 45-47); and executing the target

function (Pearce, col. 2, lines 45-47).

Conclusion

8)   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. The following is a list of pertinent prior art:

US Patents:

US005966539A

US005671422A

US006298443B1

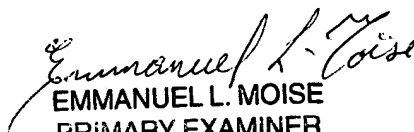US005850559A

US006178550B1

US005630052A

US005392420A

US003692989

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali M. Mashaal whose telephone number is 703-305-7854. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

EMMANUEL L. MOISE
PRIMARY EXAMINER

AM